GRAND FORKS COUNTY
HEART OF THE RED RIVER VALLEY

Approval: _____ Denial: _____

Date: _____

_____
Zoning Administrator

Planning and Zoning Department

Mound(Chamber) Septic System Application ***Page 1***

Applicant(s)/Owner(s):

Name(s) _____

Address _____

City _____ State_____Zip _____

Cell # _____ Email _____

Installer/Designer:

Name(s): _____

License Number: _____

Address: _____

City: _____ State: _____ Zip: _____

Cell#:_____ Email:_____

Parcel Information:

Property ID#(s): _____ Parcel Size:_____

Complete Legal Description: _____

_____

_____

Septic System Design Information:

1. Septic Tank Capacity: _____ gallons. (See Table 1.)

Table 1. CAPACITY OF SEPTIC TANKS *

Single-Family Dwellings - Number of Bedrooms	Multiple Dwelling Units or Apartments - One Bedroom Each	Other Uses - Maximum Fixture Units Served	Minimum Septic Tank Working Capacity in Gallons
1-3		20	1000
4	2	25	1200
5 or 6	3	33	1500
7 or 8	4	45	2000

2. Soils.

   Depth to restrictive layer or mottled soils: _____ inches.

   Maximum depth of system: _____ inches. (Depth to restrictive layer / mottled soils = 24")

   Soil Classification or Texture: _____.

   Percolation rate: _____ MPI.

   Soil Loading Rate: _____ gal/ft^2/day. (See Table 3 on next page)

   Percent Land Slope: _____ %.

3. Mound Area.

Estimated Design Flow: _____ gallons per day. (see Figure A-2)

Figure A-2 - Estimated Sewage Flows

Number of Bedrooms	Gallons Per Day
2	300
3	450
4	600
5	750
6	900

Septic System Design Information (Continued):

Sand Base Area Calculation:

_____ gpd(Design Flow) / 0.25 gal/ft^2/day(Soil Loading Rate) = _____ ft^2.(Sand Base Area)

Chamber Area Calculation:

_____ gpd(Design Flow) / 1.2 gal/ft^2/day(Soil Loading Rate) = _____ ft^2.(Chamber Base Area)

4. Dosing Chamber.

Minimum Pump Tank Size = _____ gallons. (Design Flow)

Maximum Pump Discharge: _____ gpm. (must be greater than 7.5 gpm per 100 ft^2 of chamber area)

Pump Lift Capacity: _____ feet. (must be 5 feet greater that elevation change plus pipe friction loss)

Change in elevation from pump to the top of chamber bed: _____ feet.

5. Sketch of Proposed System:

Select an appropriate scale; one inch = _____ feet.

Show pertinent property boundaries, rights-of-way, easements.

Show location of house, garage, driveway, and all other improvements, existing or proposed.

Show location and layout of sewage treatment system, wells, setbacks and separation distances.

Use attached mound diagram for detailed dimensions of chamber bed and sand base area.

Application Fee: $250 ($150 w/o Soil Testing)

I hereby authorize Grand Forks County Planning Staff to enter upon property subject to this application to gather information pertinent to this request.

Signature(s) of Applicant(s):_____ Date:_____

_____ Date:_____

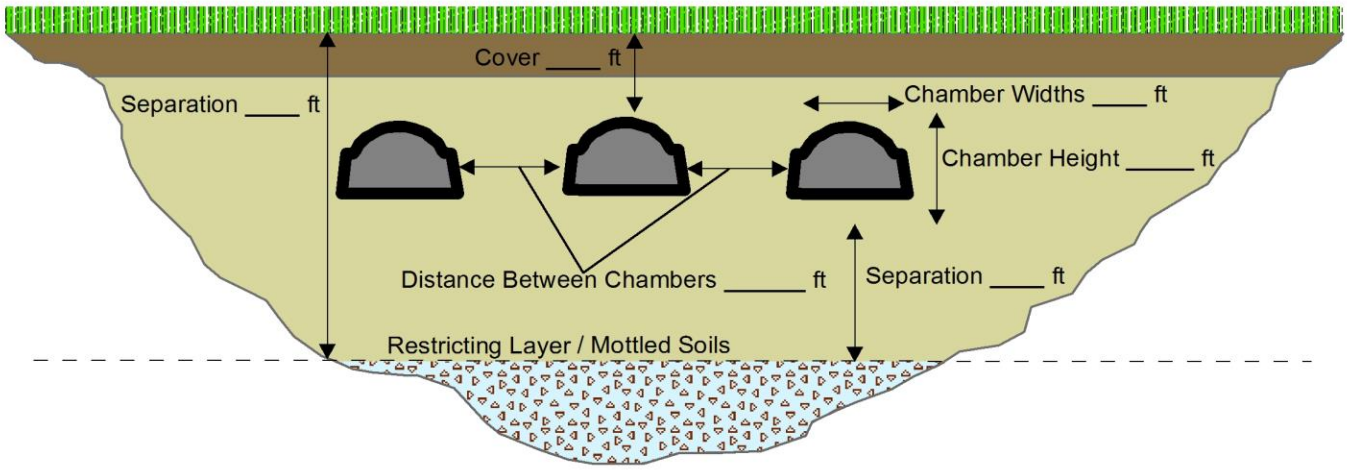
Signature(s) of Owner(s): _____ Date:_____

_____ Date:_____

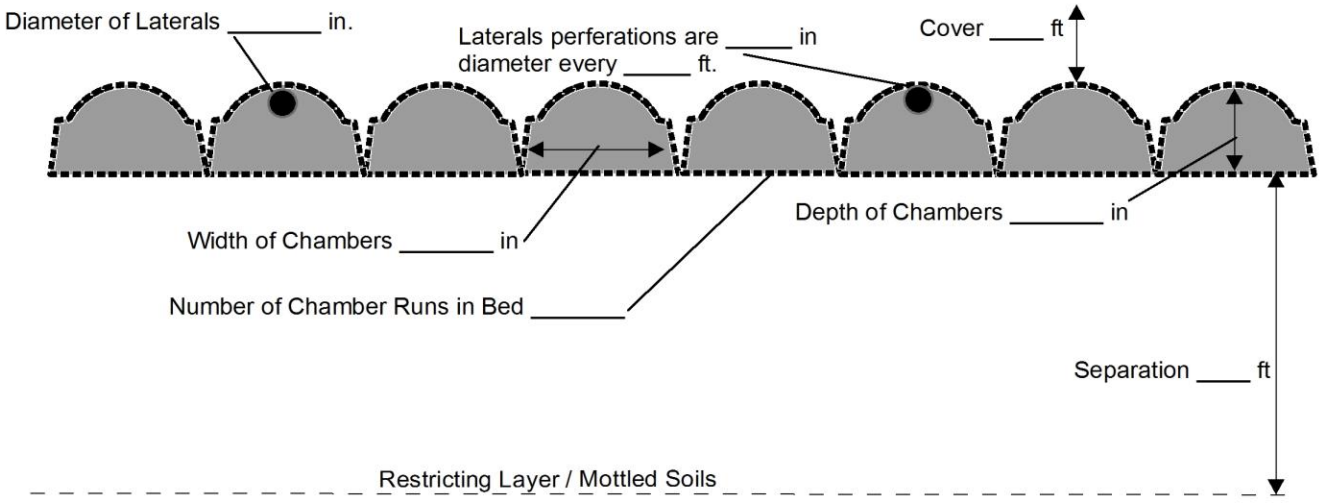
Grand Forks County
Planning and Zoning
Standard System Diagram Worksheet

Chamber Cross-Section

(for seepage beds also complete cross-section below)



Seepage Bed Cross-Section



Soil Boring Log

Client:_____
Address:_____
_____
Date: _____
Location:_____
Soil Type:_____
Disturbed / Compacted yes no
Type of observation: Probe Pit Boring

# of Bedrooms: _____
Garbage Disposal: yes no
Type: I II III IV
Flow:_____

Parent Material: Till Outwash Loess Bedrock Alluvium
Vegetation: Wet Dry Unknown
Slope Form: _____
Slope: _____ %
Drainage: Good Problems Solutions _____
Floodplain: yes no

Elevation of Boring:_____
Depth of Water:_____
Depth to Bedrock:_____
Depth of Sat. Soil: _____
Max Depth of System:_____
Soil Sizing Factor: _____
Linear Loading Rate:_____
Well Information:
Location: _____
Depth: _____
Casing Depth:_____
10' of Imp. material: yes no

Depth (inches)	Texture	Color	Structure
			Blocky Platy Prismatic None
			Blocky Platy Prismatic None
			Blocky Platy Prismatic None
			Blocky Platy Prismatic None
			Blocky Platy Prismatic None

Additional Notes:_____
_____

Preliminary design:
Trench_____ Bed_____ Atgrade _____ Mound_____ Holding Tank_____
Gravity Dist._____ Pressure Dist. _____
Sand: Serial _____ Pressure_____ Liner_____ Clay: Liner_____